

Remarks

Reconsideration of this Application is respectfully requested.

Claims 1-17, 19, and 20 are pending in the application, with claims 1, 8, and 16 being the independent claims. Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 103

Smith and Shippy

Claims 1, 3-8, 11-14, 16, 17, 19, and 20 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Number 6,813,651, issued to Smith *et al.* ("Smith"), in view of U.S. Patent Publication Number 2005/0254645 to Shippy *et al.* ("Shippy"). Applicants respectfully traverse this rejection.

The combination of Smith and Shippy does not teach or suggest each and every feature of independent claims 1, 8, and 16. Smith describes an "interface device [that] allows communication between a 1394 device and an Ethernet via an 802.3 PHY." (Smith, Abstract). In Smith, "[d]ata padding is used to make up for the difference in speeds between the 1394 link and 802.3 PHY." (Smith, col. 7, lines 40-43). In Smith, for S800 mode, four bytes of data are transmitted followed by a one byte pad byte during a 5-byte interval. (Smith, col. 7, lines 44-56). For S400 mode, during the 5-byte interval, two bytes of data are sent, then the two bytes of data are resent. The final byte transmitted in S400 mode is an "XOR function of the first and second bytes received from the link." (Smith, col. 7, line 57 - col. 8, line 2). Finally, in S200 and S100 mode, the interface device extends the 4-bit and 2-bit portion into eight bits by duplicating the 4 bits once for S200 mode and duplicating the 2-bit portion four times for S100 mode. (Smith, col. 8, lines 4-16).

Thus, Smith does not teach or suggest a method including at least "appending to each byte in said first data stream a data type identification (DTID) thereby creating a technology independent data stream having a first bit rate" as recited in independent claim 1; a communications reconciliation sub-layer including "a transmit data type identification (DTID) circuit coupled to an output of a first transmission medium for appending a DTID to each byte in an original data stream, ... thereby generating a technology independent data stream at first bit rate that represents the original data stream from said first transmission medium," as recited in independent claim 8; or a communications sub-layer including "means for appending a data type identification to each byte in said first data stream, ... thereby creating a technology independent data stream from said first data stream, said technology independent data stream having a first bit rate," as recited in independent claim 16.

Additionally, in Smith, "[t]o indicate the speed of the link data, a preamble byte is first transmitted." (Smith, col. 7, lines 22-40). As described in Smith, the preamble describes the speed of the 1394b packet (i.e., S100, S200, S400, or S800). Smith does not teach or suggest using the preamble to identify the class of data being transmitted over 802.3. Thus, Smith does not teach or suggest a method including at least "wherein the DTID identifies a class of data associated with the byte," as recited in independent claims 1, 8, and 16.

Shippy does not cure these deficiencies of Smith. Shippy describes a PCX data block 606 that is sent from a PCX module 106 to an application decoder 102. (Shippy, ¶[0055]). The PCX data block includes a header 608 portion and a payload 616 portion. (Id.) The payload portion includes a tag having "a stream identifier datum 612 for distinctly identifying the data stream, and a source datum 614 for distinctly identifying the stream source." (Id.) Therefore, the tag in Shippy uniquely

identifies the stream, not the class of data in the stream, and the source of the stream.

Accordingly, Shippy also does not teach or suggest "wherein the DTID identifies a class of data associated with the byte," as recited in independent claims 1, 8, and 16.

Furthermore, as described in Shippy, the "tag is inserted into the payload in the place of the saved payload portion." (Shippy, ¶[0066]). Shippy does not attach the tag to each byte in the stream. Instead, the tag in Shippy replaces the payload. (Shippy, ¶[0055]).

Thus, Shippy also does not teach or suggest a method including at least "appending to each byte in said first data stream a data type identification (DTID) thereby creating a technology independent data stream having a first bit rate" as recited in independent claim 1; a communications reconciliation sub-layer including "a transmit data type identification (DTID) circuit coupled to an output of a first transmission medium for appending a DTID to each byte in an original data stream, ... thereby generating a technology independent data stream at first bit rate that represents the original data stream from said first transmission medium," as recited in independent claim 8; or a communications sub-layer including "means for appending a data type identification to each byte in said first data stream, ... thereby creating a technology independent data stream from said first data stream, said technology independent data stream having a first bit rate," as recited in independent claim 16.

Accordingly, the combination of Smith and Shippy does not teach or suggest each and every feature of independent claims 1, 8, and 16. For at least these reasons, independent claims 1, 8, and 16 are patentable over the combination of Smith and Shippy. Claims 3-7 depend from claim 1; claims 11-14 depend from claim 8, and claims 17, 19, and 20 depend from claim 16. For at least these reasons, and further in view of their own features, dependent claims 3-7, 11-14, 17, 19, and 20 are patentable

over the combination of Smith and Shippy. Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 9 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith, in view of Shippy. Applicants respectfully traverse this rejection. Claim 9 depends from claim 1 and claim 15 depends from claim 8. As discussed above, the combination of Smith and Shippy does not teach or suggest each and every feature of independent claims 1 and 8. For at least these reasons, and further in view of their own features, dependent claims 9 and 15 are patentable over the combination of Smith and Shippy. Reconsideration and withdrawal of the rejection are therefore respectfully requested

Smith, Shippy, and Cheung

Claims 2 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith, in view of Shippy, and further in view of U.S. Patent Publication Number 2004/0039866 to Cheung (“Cheung”). Applicants respectfully traverse this rejection.

Claim 2 depends from claim 1 and claim 10 depends from claim 8. Cheung does not overcome all the deficiencies of the combination of Smith and Shippy relative to independent claims 1 and 8 described above. For at least those reasons, and further in view of their own features, dependent claims 2 and 10 are patentable over the combination of Smith, Shippy, and Cheung. Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Conclusion

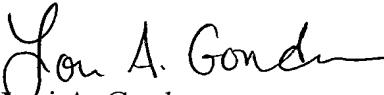
All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully

request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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